

COHEN, DIPPELL AND EVERIST, P. C.

TABLE III
COMPUTED CONTOUR DATA
FOR THE PROPOSED FM OPERATION OF
AMENDED APPLICATION BPH-901224MI
OCEAN CITY, MARYLAND
NOVEMBER 1991
(continued)

| Radial Bearing N °E,T | Average* Elevation 3 to 16 km meters | Effective Height 3 to 16 km meters | Effective Radiated Power dBk | Predicted Distance to Contour | |
|-----------------------------|---|---|---------------------------------------|-------------------------------|-----------------------|
| | | | | 60 dBu F(50,50) km | 54 dBu F(50,10) km |
| 301 | 9.4 | 95.5 | 2.50 | 20.9 | 31.1 |
| 302 | 9.4 | 95.5 | 2.50 | 20.9 | 31.1 |
| 303 | 9.5 | 95.4 | 2.44 | 20.9 | 31.0 |
| 304 | 9.5 | 95.4 | 2.39 | 20.8 | 30.9 |
| 305 | 9.6 | 95.3 | 2.33 | 20.7 | 30.7 |
| 306 | 9.6 | 95.3 | 2.33 | 20.7 | 30.7 |
| 307 | 9.6 | 95.3 | 2.33 | 20.7 | 30.7 |
| 308 | 9.6 | 95.3 | 2.33 | 20.7 | 30.7 |
| 309 | 9.6 | 95.3 | 2.27 | 20.6 | 30.6 |
| 310 | 9.7 | 95.2 | 2.27 | 20.6 | 30.6 |
| 311 | 9.7 | 95.2 | 2.27 | 20.6 | 30.6 |
| 312 | 9.7 | 95.2 | 2.27 | 20.6 | 30.6 |
| 313 | 9.7 | 95.2 | 2.27 | 20.6 | 30.6 |
| 314 | 9.7 | 95.2 | 2.33 | 20.7 | 30.7 |
| 315 | 9.6 | 95.3 | 2.33 | 20.7 | 30.7 |
| 316 | 9.6 | 95.3 | 2.39 | 20.8 | 30.8 |
| 317 | 9.6 | 95.3 | 2.44 | 20.9 | 30.9 |
| 318 | 9.7 | 95.2 | 2.44 | 20.8 | 30.9 |
| 319 | 9.7 | 95.2 | 2.50 | 20.9 | 31.0 |
| 320 | 9.7 | 95.2 | 2.50 | 20.9 | 31.0 |
| 321 | 9.7 | 95.2 | 2.50 | 20.9 | 31.0 |
| 322 | 9.6 | 95.3 | 2.61 | 21.1 | 31.2 |
| 323 | 9.5 | 95.4 | 2.78 | 21.3 | 31.6 |
| 324 | 9.4 | 95.5 | 2.89 | 21.4 | 31.8 |
| 325 | 9.4 | 95.5 | 2.99 | 21.6 | 31.9 |
| 326 | 9.3 | 95.6 | 3.05 | 21.6 | 32.1 |
| 327 | 9.2 | 95.7 | 3.15 | 21.8 | 32.3 |
| 328 | 9.1 | 95.8 | 3.31 | 22.0 | 32.6 |
| 329 | 9.0 | 95.9 | 3.41 | 22.1 | 32.8 |
| 330 | 8.8 | 96.1 | 3.46 | 22.2 | 32.9 |
| 331 | 8.7 | 96.2 | 3.56 | 22.4 | 33.2 |
| 332 | 8.6 | 96.3 | 3.66 | 22.5 | 33.4 |
| 333 | 8.4 | 96.5 | 3.90 | 22.8 | 33.9 |
| 334 | 8.3 | 96.6 | 4.05 | 23.1 | 34.2 |
| 335 | 8.3 | 96.6 | 4.14 | 23.2 | 34.4 |

COHEN, DIPPELL AND EVERIST, P. C.

TABLE III
COMPUTED CONTOUR DATA
FOR THE PROPOSED FM OPERATION OF
AMENDED APPLICATION BPH-901224MI
OCEAN CITY, MARYLAND
NOVEMBER 1991
(continued)

| Radial Bearing N °E,T | Average* Elevation 3 to 16 km meters | Effective Height 3 to 16 km meters | Effective Radiated Power dBk | Predicted Distance to Contour | |
|-----------------------------|---|---|---------------------------------------|-------------------------------|-----------------------|
| | | | | 60 dBu F(50,50) km | 54 dBu F(50,10) km |
| 336 | 8.1 | 96.8 | 4.28 | 23.4 | 34.7 |
| 337 | 8.0 | 96.9 | 4.42 | 23.6 | 35.0 |
| 338 | 7.9 | 97.0 | 4.51 | 23.7 | 35.2 |
| 339 | 7.8 | 97.1 | 4.60 | 23.9 | 35.4 |
| 340 | 7.7 | 97.2 | 4.68 | 24.0 | 35.6 |
| 341 | 7.6 | 97.3 | 4.77 | 24.1 | 35.8 |
| 342 | 7.4 | 97.5 | 4.77 | 24.1 | 35.8 |
| 343 | 7.2 | 97.7 | 4.77 | 24.2 | 35.9 |
| 344 | 7.0 | 97.9 | 4.77 | 24.2 | 35.9 |
| 345 | 6.8 | 98.1 | 4.77 | 24.2 | 35.9 |
| 346 | 6.6 | 98.3 | 4.77 | 24.2 | 36.0 |
| 347 | 6.4 | 98.5 | 4.77 | 24.2 | 36.0 |
| 348 | 6.2 | 98.7 | 4.77 | 24.3 | 36.0 |
| 349 | 5.9 | 99.0 | 4.77 | 24.3 | 36.1 |
| 350 | 5.6 | 99.3 | 4.77 | 24.3 | 36.1 |
| 351 | 5.4 | 99.5 | 4.77 | 24.4 | 36.2 |
| 352 | 5.3 | 99.6 | 4.77 | 24.4 | 36.2 |
| 353 | 5.4 | 99.5 | 4.77 | 24.4 | 36.2 |
| 354 | 5.6 | 99.3 | 4.77 | 24.3 | 36.1 |
| 355 | 5.0 | 99.9 | 4.77 | 24.3 | 36.1 |

*Based on NGDC 3-second data base.

Channel 295A (106.9 MHz)
Effective Radiated Power 3 kW (4.77 dBk) Maximum
Center of Radiation 104.9 meters AMSL
Antenna Height Above Average Terrain 100 meters

North Latitude: 38° 22' 52"
West Longitude: 75° 10' 32"

COHEN, DIPPELL AND EVERIST, P. C.

TABLE IV
COMPUTED CONTOUR DATA
FOR THE FM OPERATION OF
WDLE-FM, FEDERALSBURG, MARYLAND
NOVEMBER 1991

| Radial Bearing N °E,T | Average* Elevation 3 to 16 km meters | Effective Height 3 to 16 km meters | Predicted Distance to Contour | |
|-----------------------------|---|---|-------------------------------|-----------------------|
| | | | 60 dBu F(50,50) km | 54 dBu F(50,10) km |
| 105 | 12.9 | 100.8 | 28.6 | 43.4 |
| 106 | 13.0 | 100.7 | 28.6 | 43.3 |
| 107 | 13.2 | 100.5 | 28.5 | 43.3 |
| 108 | 13.4 | 100.3 | 28.5 | 43.3 |
| 109 | 13.5 | 100.2 | 28.5 | 43.2 |
| 110 | 13.8 | 99.9 | 28.5 | 43.2 |
| 111 | 13.9 | 99.8 | 28.5 | 43.1 |
| 112 | 14.1 | 99.6 | 28.4 | 43.1 |
| 113 | 14.3 | 99.4 | 28.4 | 43.1 |
| 114 | 14.3 | 99.4 | 28.4 | 43.1 |
| 115 | 14.2 | 99.5 | 28.4 | 43.1 |
| 116 | 14.1 | 99.6 | 28.4 | 43.1 |
| 117 | 14.0 | 99.7 | 28.4 | 43.1 |
| 118 | 13.9 | 99.8 | 28.5 | 43.1 |
| 119 | 13.8 | 99.9 | 28.5 | 43.2 |
| 120 | 13.7 | 100.0 | 28.5 | 43.2 |
| 121 | 13.6 | 100.1 | 28.5 | 43.2 |
| 122 | 13.4 | 100.3 | 28.5 | 43.3 |
| 123 | 13.3 | 100.4 | 28.5 | 43.3 |
| 124 | 13.2 | 100.5 | 28.5 | 43.3 |
| 125 | 13.0 | 100.7 | 28.6 | 43.3 |
| 126 | 12.8 | 100.9 | 28.6 | 43.4 |
| 127 | 12.7 | 101.0 | 28.6 | 43.4 |
| 128 | 12.5 | 101.2 | 28.6 | 43.4 |
| 129 | 12.4 | 101.3 | 28.6 | 43.5 |
| 130 | 12.3 | 101.4 | 28.7 | 43.5 |
| 131 | 12.2 | 101.5 | 28.7 | 43.5 |
| 132 | 12.1 | 101.6 | 28.7 | 43.5 |
| 133 | 12.1 | 101.6 | 28.7 | 43.5 |
| 134 | 12.0 | 101.7 | 28.7 | 43.5 |
| 135 | 12.9 | 100.8 | 28.6 | 43.4 |
| 136 | 11.9 | 101.8 | 28.7 | 43.6 |
| 137 | 11.9 | 101.8 | 28.7 | 43.6 |
| 138 | 11.9 | 101.8 | 28.7 | 43.6 |
| 139 | 11.9 | 101.8 | 28.7 | 43.6 |
| 140 | 11.9 | 101.8 | 28.7 | 43.6 |

COHEN, DIPPELL AND EVERIST, P. C.

TABLE IV
COMPUTED CONTOUR DATA
FOR THE FM OPERATION OF
WDLE-FM, FEDERALSBURG, MARYLAND
NOVEMBER 1991
(continued)

| Radial Bearing N °E,T | Average* Elevation 3 to 16 km meters | Effective Height 3 to 16 km meters | Predicted Distance to Contour | |
|-----------------------------|---|---|-------------------------------|-----------------------|
| | | | 60 dBu F(50,50) km | 54 dBu F(50,10) km |
| 141 | 11.9 | 101.8 | 28.7 | 43.6 |
| 142 | 12.0 | 101.7 | 28.7 | 43.5 |
| 143 | 11.9 | 101.8 | 28.7 | 43.6 |
| 144 | 11.7 | 102.0 | 28.7 | 43.6 |
| 145 | 11.4 | 102.3 | 28.8 | 43.7 |
| 146 | 11.3 | 102.4 | 28.8 | 43.7 |
| 147 | 11.3 | 102.4 | 28.8 | 43.7 |
| 148 | 11.4 | 102.3 | 28.8 | 43.7 |
| 149 | 11.6 | 102.1 | 28.7 | 43.6 |
| 150 | 11.8 | 101.9 | 28.7 | 43.6 |
| 151 | 12.0 | 101.7 | 28.7 | 43.5 |
| 152 | 12.2 | 101.5 | 28.7 | 43.5 |
| 153 | 12.3 | 101.4 | 28.7 | 43.5 |
| 154 | 12.2 | 101.5 | 28.7 | 43.5 |
| 155 | 12.2 | 101.5 | 28.7 | 43.5 |

*Based on NGDC 3-second data base.

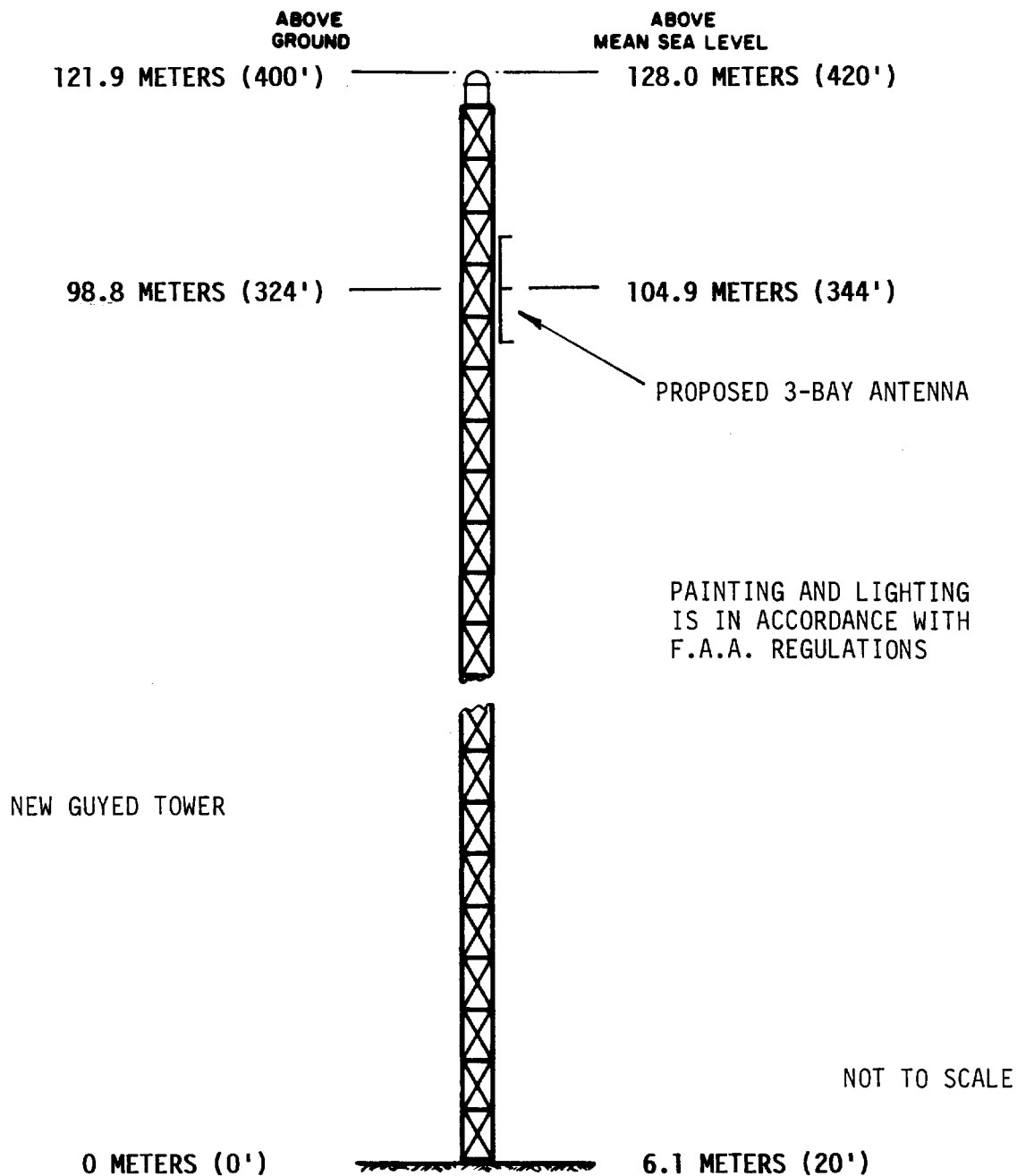
**Assumes maximum Class A facilities, 6 kW-100 meters
(actual facilities 3.9 kW-124 meters).

Channel 295A (106.7 MHz)
Effective Radiated Power 6 kW (7.78 dBk)**
Average Elevation 3 to 16 km 13.7 meters AMSL
Center of Radiation 113.7 meters AMSL
Antenna Height Above Average Terrain 100 meters

North Latitude: 38° 46' 02"
West Longitude: 75° 44' 46"

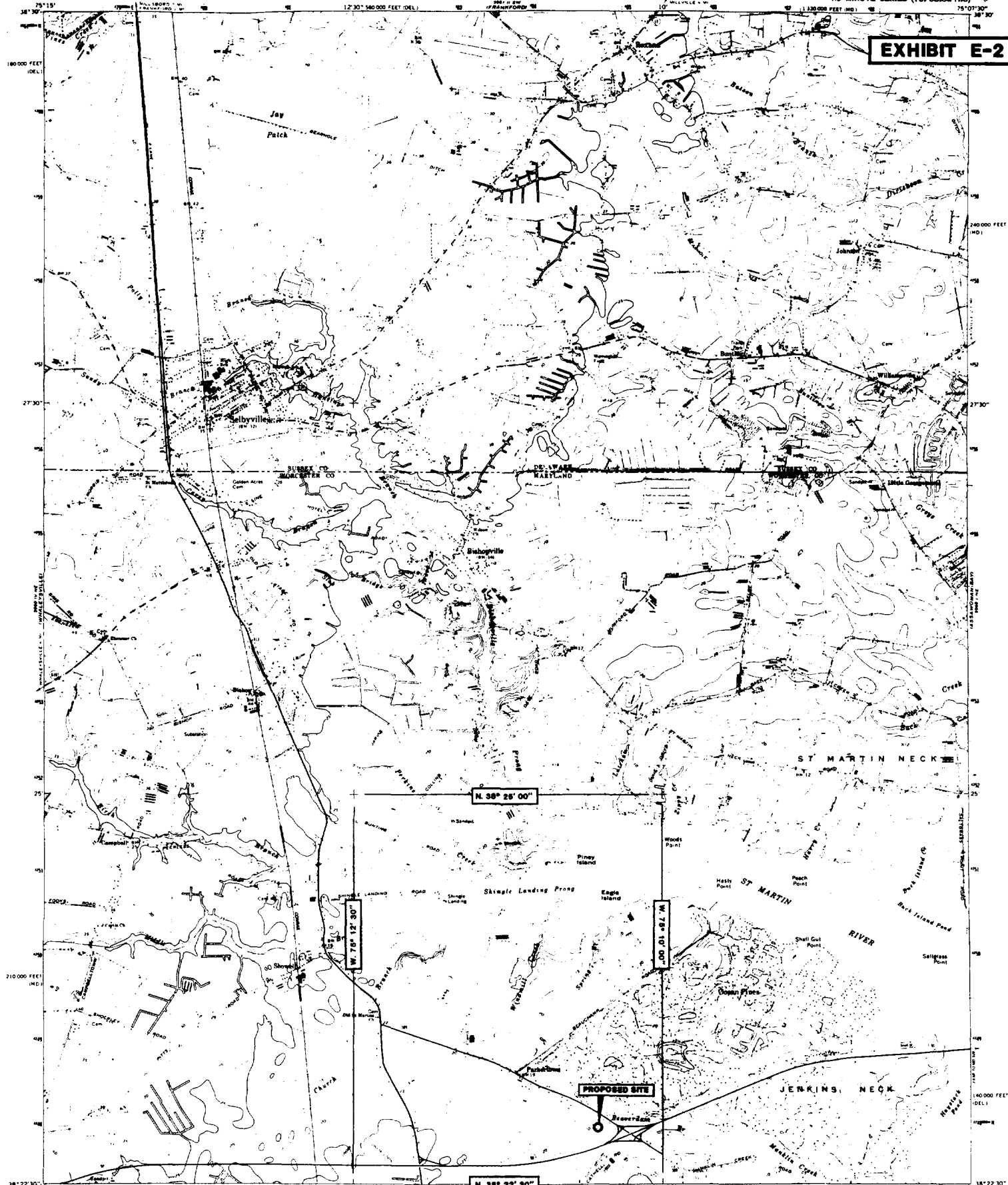
COHEN, DIPPELL AND EVERIST, P. C.
TABLE V
TABULATION OF
RELATIVE FIELD AND ERP IN DBK
OF PROPOSED DIRECTIONAL PATTERN FOR
FM OPERATION AT OCEAN CITY, MARYLAND
NOVEMBER 1991

| <u>Azimuth</u> <u>N °E,T</u> | <u>Relative</u> <u>Field</u> | <u>Effective</u> <u>Radiated Power</u> | | <u>Azimuth</u> <u>N °E,T</u> | <u>Relative</u> <u>Field</u> | <u>Effective</u> <u>Radiated Power</u> | |
|---------------------------------|---------------------------------|---|------------|---------------------------------|---------------------------------|---|------------|
| | | <u>kW</u> | <u>dBk</u> | | | <u>kW</u> | <u>dBk</u> |
| 0 | 1.000 | 3.00 | 4.77 | 297 | 0.805 | 1.94 | 2.89 |
| 10 | 1.000 | 3.00 | 4.77 | 298 | 0.790 | 1.87 | 2.72 |
| 20 | 1.000 | 3.00 | 4.77 | 299 | 0.785 | 1.85 | 2.67 |
| 30 | 1.000 | 3.00 | 4.77 | 300 | 0.770 | 1.78 | 2.50 |
| 40 | 1.000 | 3.00 | 4.77 | 301 | 0.770 | 1.78 | 2.50 |
| 50 | 1.000 | 3.00 | 4.77 | 302 | 0.765 | 1.76 | 2.44 |
| 60 | 1.000 | 3.00 | 4.77 | 303 | 0.765 | 1.76 | 2.44 |
| 70 | 1.000 | 3.00 | 4.77 | 304 | 0.760 | 1.73 | 2.39 |
| 80 | 1.000 | 3.00 | 4.77 | 305 | 0.755 | 1.71 | 2.33 |
| 90 | 1.000 | 3.00 | 4.77 | 306 | 0.755 | 1.71 | 2.33 |
| 100 | 1.000 | 3.00 | 4.77 | 307 | 0.750 | 1.69 | 2.27 |
| 110 | 1.000 | 3.00 | 4.77 | 308 | 0.750 | 1.69 | 2.27 |
| 120 | 1.000 | 3.00 | 4.77 | 309 | 0.750 | 1.69 | 2.27 |
| 130 | 1.000 | 3.00 | 4.77 | 310 | 0.750 | 1.69 | 2.27 |
| 140 | 1.000 | 3.00 | 4.77 | 311 | 0.750 | 1.69 | 2.27 |
| 150 | 1.000 | 3.00 | 4.77 | 312 | 0.750 | 1.69 | 2.27 |
| 160 | 1.000 | 3.00 | 4.77 | 313 | 0.750 | 1.69 | 2.27 |
| 170 | 1.000 | 3.00 | 4.77 | 314 | 0.755 | 1.71 | 2.33 |
| 180 | 1.000 | 3.00 | 4.77 | 315 | 0.755 | 1.71 | 2.33 |
| 190 | 1.000 | 3.00 | 4.77 | 316 | 0.760 | 1.73 | 2.39 |
| 200 | 1.000 | 3.00 | 4.77 | 317 | 0.765 | 1.76 | 2.44 |
| 210 | 1.000 | 3.00 | 4.77 | 318 | 0.765 | 1.76 | 2.44 |
| 220 | 1.000 | 3.00 | 4.77 | 319 | 0.770 | 1.78 | 2.50 |
| 230 | 1.000 | 3.00 | 4.77 | 320 | 0.770 | 1.78 | 2.50 |
| 240 | 1.000 | 3.00 | 4.77 | 321 | 0.780 | 1.83 | 2.61 |
| 250 | 1.000 | 3.00 | 4.77 | 322 | 0.785 | 1.85 | 2.67 |
| 260 | 1.000 | 3.00 | 4.77 | 323 | 0.795 | 1.90 | 2.78 |
| 270 | 1.000 | 3.00 | 4.77 | 324 | 0.805 | 1.94 | 2.89 |
| 280 | 1.000 | 3.00 | 4.77 | 325 | 0.815 | 1.99 | 2.99 |
| 281 | 1.000 | 3.00 | 4.77 | 326 | 0.820 | 2.02 | 3.05 |
| 282 | 0.995 | 2.97 | 4.73 | 327 | 0.830 | 2.07 | 3.15 |
| 283 | 0.990 | 2.94 | 4.68 | 328 | 0.845 | 2.14 | 3.31 |
| 284 | 0.985 | 2.91 | 4.64 | 329 | 0.855 | 2.19 | 3.41 |
| 285 | 0.970 | 2.82 | 4.51 | 330 | 0.860 | 2.22 | 3.46 |
| 286 | 0.995 | 2.74 | 4.37 | 331 | 0.870 | 2.27 | 3.56 |
| 287 | 0.940 | 2.65 | 4.23 | 332 | 0.890 | 2.38 | 3.76 |
| 288 | 0.930 | 2.59 | 4.14 | 333 | 0.910 | 2.48 | 3.95 |
| 289 | 0.910 | 2.48 | 3.95 | 334 | 0.930 | 2.59 | 4.14 |
| 290 | 0.890 | 2.38 | 3.76 | 335 | 0.940 | 2.65 | 4.23 |
| 291 | 0.870 | 2.27 | 3.56 | 336 | 0.955 | 2.74 | 4.37 |
| 292 | 0.860 | 2.22 | 3.46 | 337 | 0.970 | 2.82 | 4.51 |
| 293 | 0.850 | 2.17 | 3.36 | 338 | 0.985 | 2.91 | 4.64 |
| 294 | 0.840 | 2.12 | 3.26 | 339 | 0.990 | 2.94 | 4.68 |
| 295 | 0.830 | 2.07 | 3.15 | 340 | 0.995 | 2.97 | 4.73 |
| 296 | 0.815 | 1.99 | 2.99 | 341 | 1.000 | 3.00 | 4.77 |
| | | | | 350 | 1.000 | 3.00 | 4.77 |



VERTICAL SKETCH
FOR THE PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
NOVEMBER 1991

EXHIBIT E-2



Mapped, edited, and published by the Geological Survey
Control by USGS, NOS/NOAA, and Maryland Bureau of Control Surveys
Topography by photogrammetric methods from aerial
photographs taken 1963. Field checked 1967

Selected hydrographic data compiled from NOS chart 1220 (1966)
This information is not intended for navigational purposes

Projection: 10,000-foot grid ticks based on Maryland
coordinate system, and Delaware coordinate system. 1000-meter
Universal Transverse Mercator grid ticks, zone 18, shown in
blue. 1927 North American Datum. To check on the projected
North American Datum 1983 move the projection lines
8 meters south and 32 meters west as shown by dashed
corner ticks

Few red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked

UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE 1:24,000
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET-DATUM IS MEAN LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
SHORELINE SHOWN REPRESENTS COMPARISON OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS LESS THAN 1 FOOT

THIS MAP COMPLEYS WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80202 OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

ROAD CLASSIFICATION
Primary highway: all weather, light duty road, all weather
hard surface, improved surface
Secondary highway: all weather, unpaved road, fair or dry
hard surface, weather

U.S. Route State Route

SELBYVILLE, DEL.-MD.
38075-02-77-024

1967
PHOTOREVISED 1983
Data 5000 1 NW 46888 7583

Revisions shown in purple and woodland compiled from aerial
photographs taken 1981 and other sources. This information not
field checked. Map edited 1983

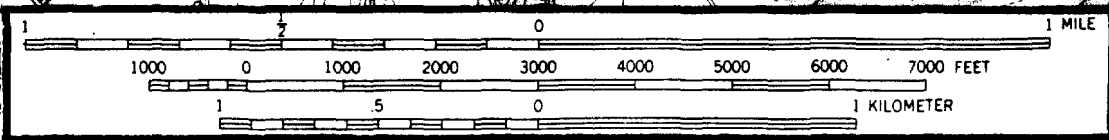


EXHIBIT E-2A

**TRANSMITTER SITE
FOR THE PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
NOVEMBER 1991**

COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, D.C.

N. 38° 25' 00"

SELBYVILLE, DEL. - MD.
38075-D2-TF-024

1967
PHOTOREVISED 1983
DMA 5960 I NW-SERIES V833

Hasty
Point

W. 75° 12' 30"

W. 75° 10' 00"

SITE COORDINATES

**N. 38° 22' 52"
W. 75° 10' 32"**

**THE SITE ELEVATION HAS BEEN
ESTABLISHED BY A LICENSED
SURVEYOR TO BE 20' AMSL**

CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES AND SOUNDINGS IN FEET-DATUM IS MEAN LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE MEAN RANGE OF TIDE IS LESS THAN 1 FOOT

PROPOSED SITE

N. 38° 22' 30"

12'30" 482

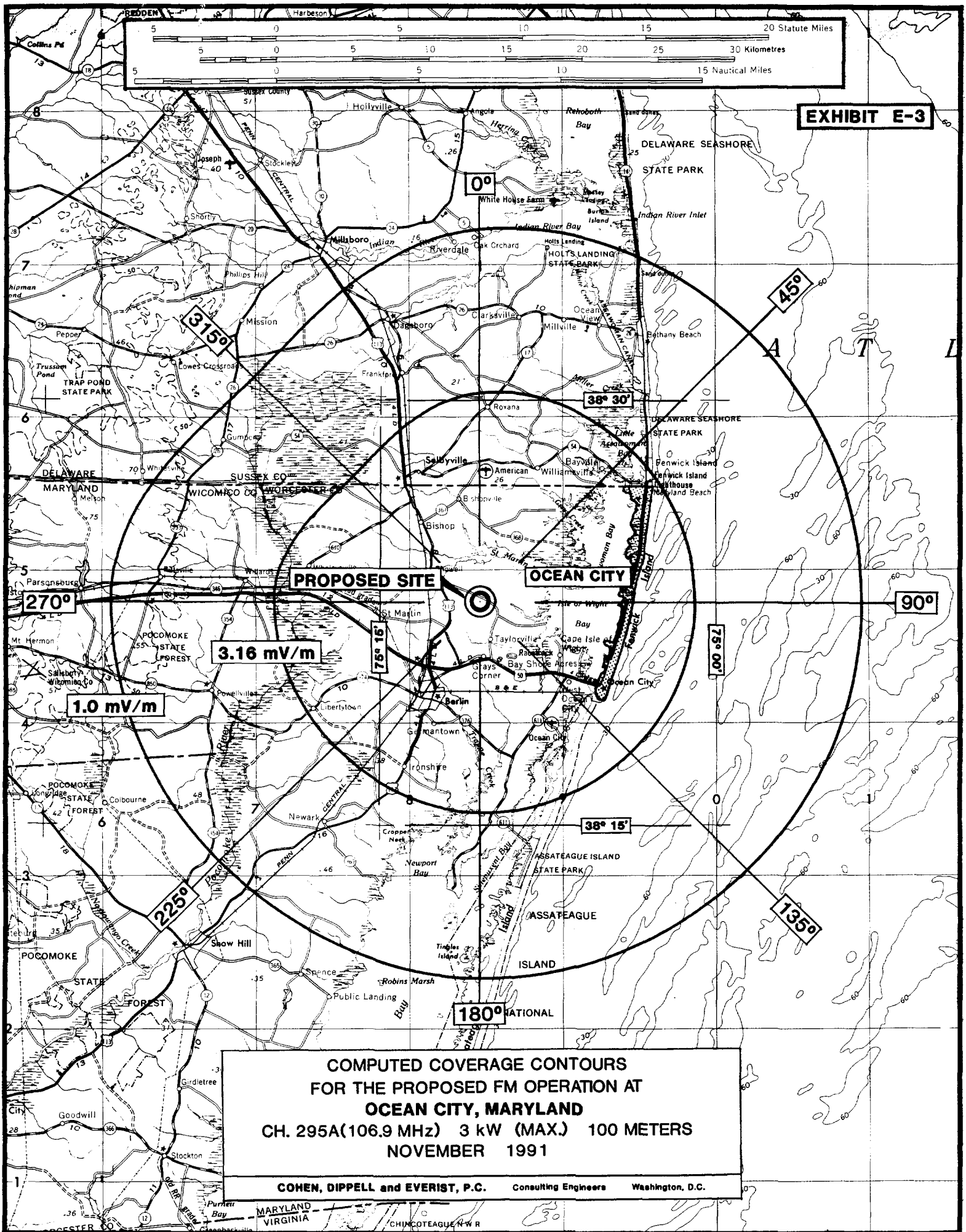
BERLIN 3.8 MI.
SNOW HILL 19 MI.

484

485

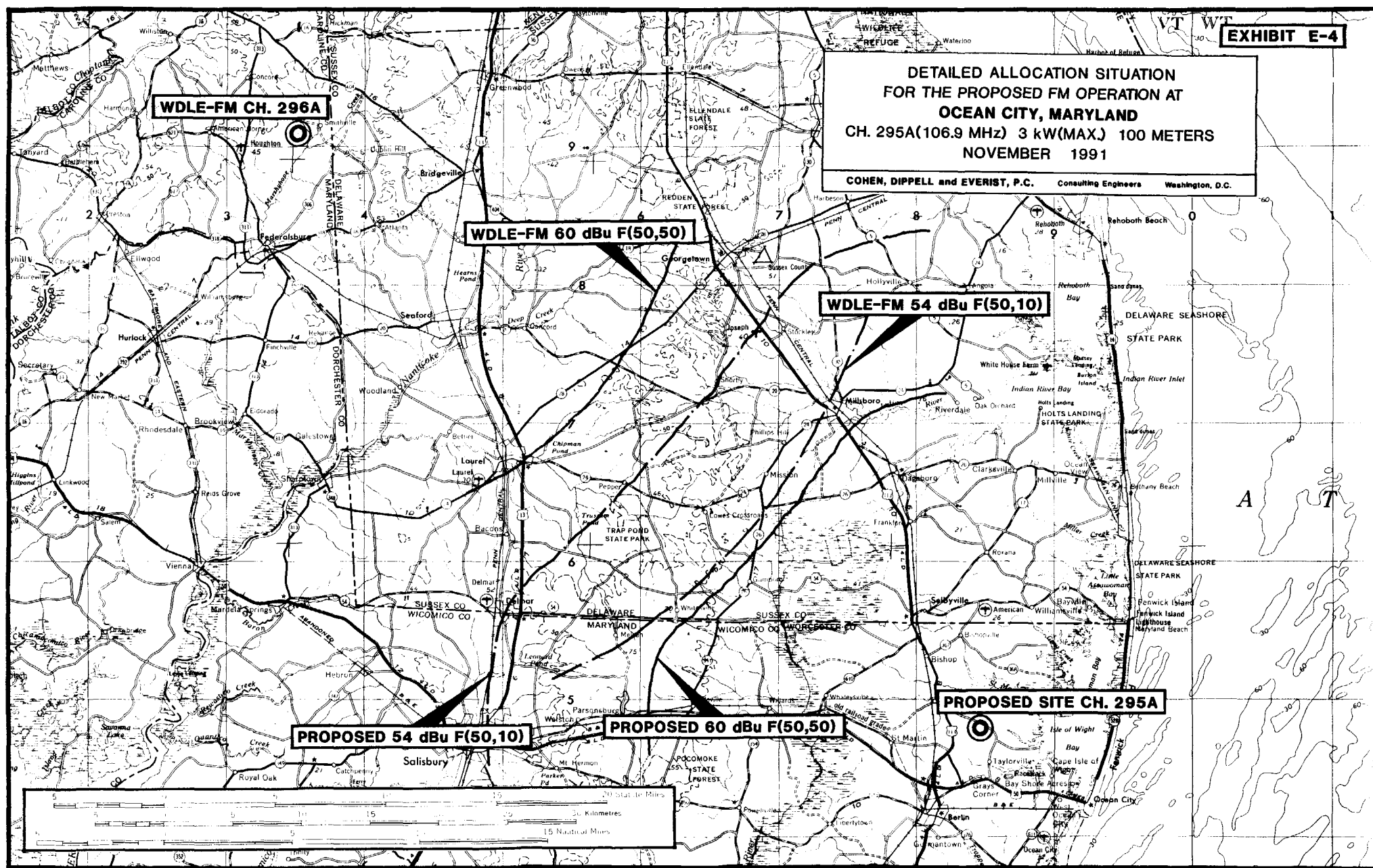
10'

1.9 MI. TO U.S. 50



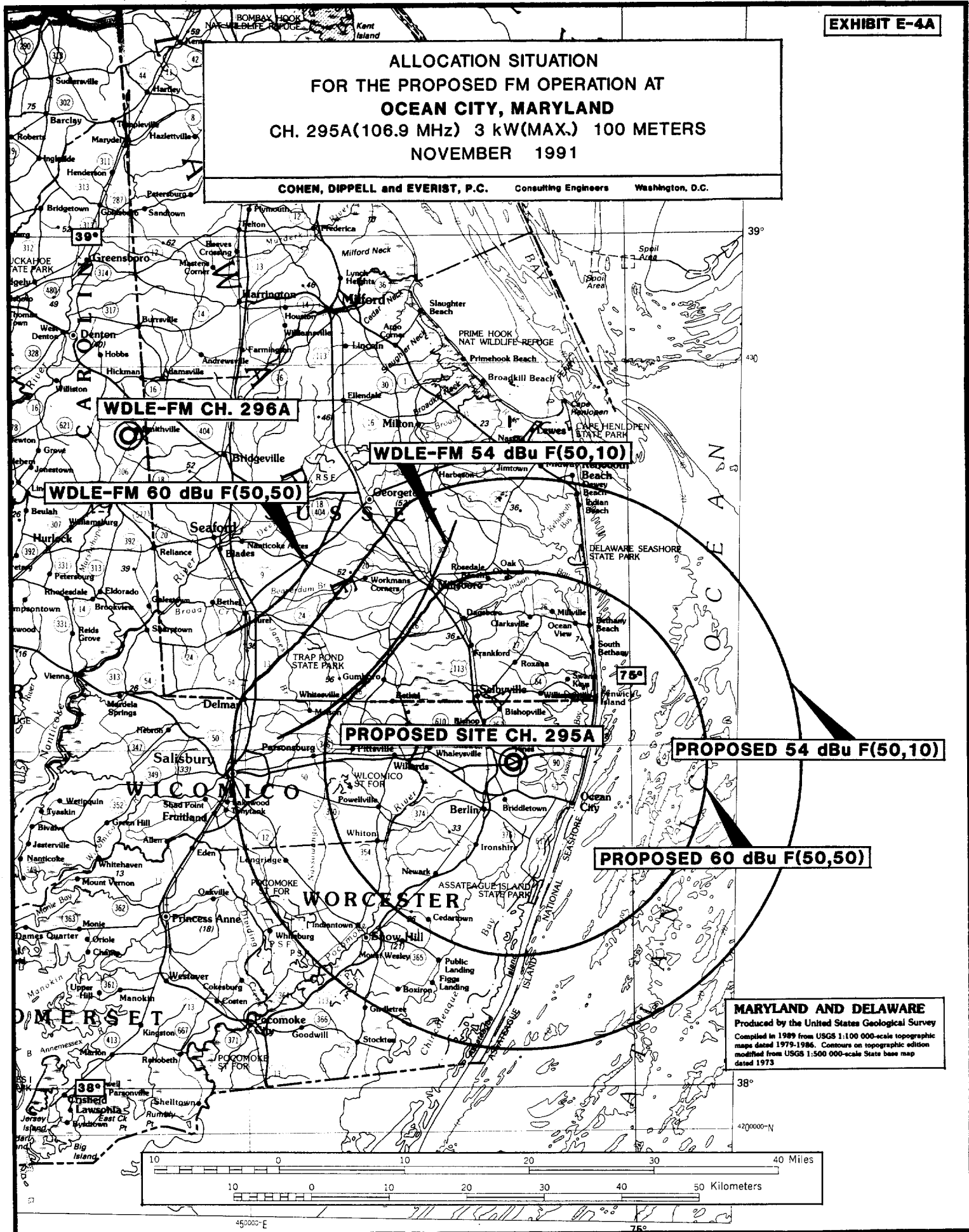
**DETAILED ALLOCATION SITUATION
FOR THE PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
CH. 295A(106.9 MHz) 3 kW(MAX.) 100 METERS
NOVEMBER 1991**

COHEN, DIPPILL and EVERIST, P.C. Consulting Engineers Washington, D.C.



**ALLOCATION SITUATION
FOR THE PROPOSED FM OPERATION AT
OCEAN CITY, MARYLAND
CH. 295A(106.9 MHz) 3 kW(MAX.) 100 METERS
NOVEMBER 1991**

COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, D.C.



DIETZGEN CORPORATION
MADE IN U.S.A.

NO. 341-P DIETZGEN GRAPH PAPER
POLAR CO-ORDINATE

30°
330°

20°
340°

10°
350°

0

350°
10°

340°
20°

330°
30°

RELATIVE FIELD

EXHIBIT E-5A

40°
320°

320°
40°

50°
310°

310°
50°

60°
300°

300°
60°

70°
290°

290°
70°

80°
280°

280°
80°

90°
270°

270°
90°

100°
260°

260°
100°

110°
250°

250°
110°

120°
240°

240°
120°

130°
230°

230°
130°

140°
220°

220°
140°

PROPOSED FM ANTENNA ENVELOPE

HORIZONTAL PLANE PATTERN

RELATIVE FIELD

OCEAN CITY, MARYLAND

NOVEMBER 1991

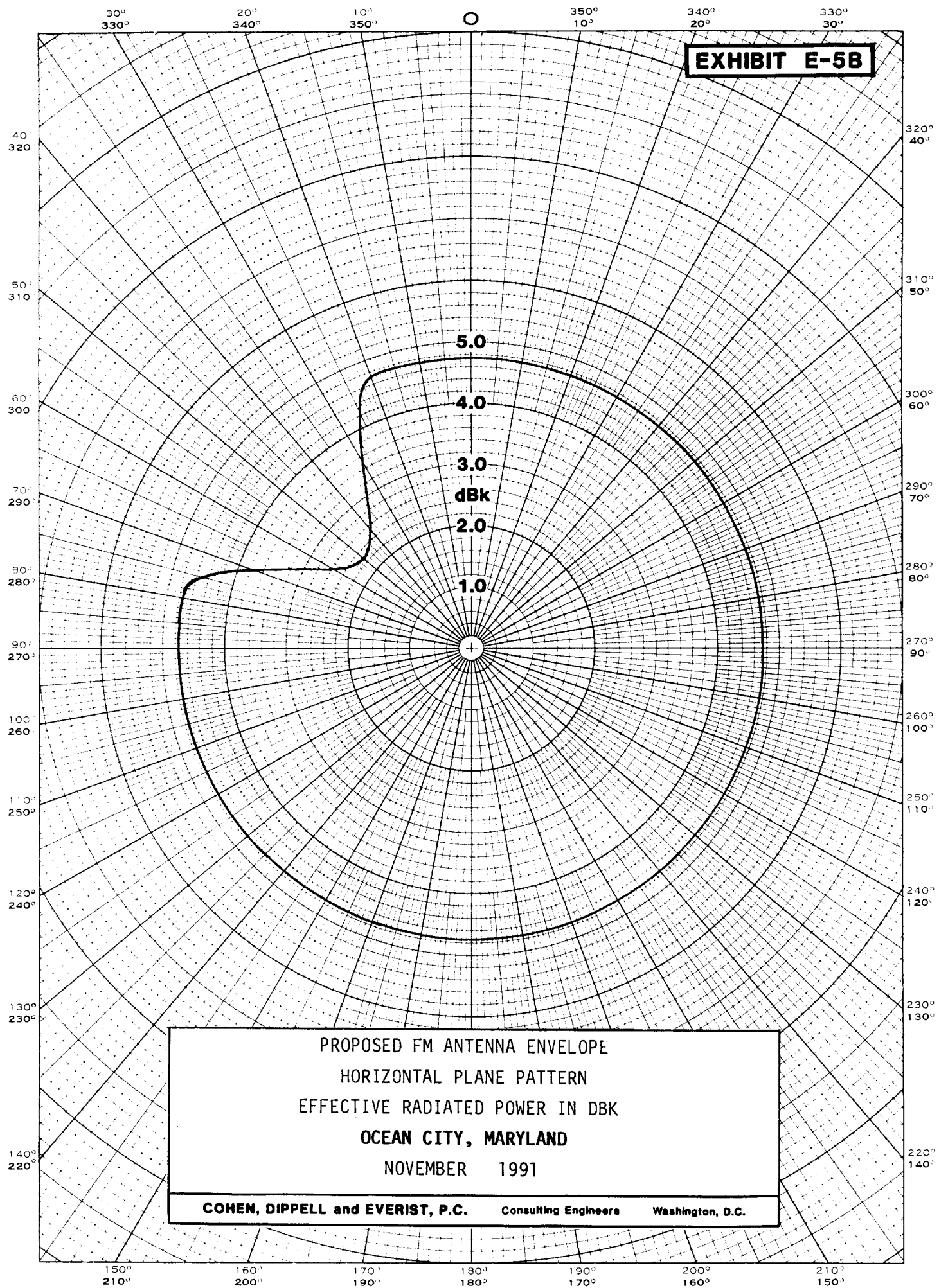
COHEN, DIPPELL and EVERIST, P.C.

Consulting Engineers

Washington, D.C.

DIETZGEN CORPORATION
MADE IN U.S.A.
NO. 341-P DIETZGEN GRAPH PAPER
POLAR CO-ORDINATE

EXHIBIT E-5B



PROPOSED FM ANTENNA ENVELOPE
HORIZONTAL PLANE PATTERN
EFFECTIVE RADIATED POWER IN DBK
OCEAN CITY, MARYLAND
NOVEMBER 1991

COHEN, DIPPELL and EVERIST, P.C. Consulting Engineers Washington, D.C.



US Department
of Transportation
Federal Aviation
Administration

SYSTEM MANAGEMENT BRANCH, AEA-530
AIR TRAFFIC DIVISION/EASTERN REGION
FEDERAL AVIATION ADMINISTRATION
FITZGERALD FEDERAL BUILDING
JFK INTERNATIONAL AIRPORT
JAMAICA, NEW YORK 11430

IN REPLY REFER TO
AERONAUTICAL STUDY
NO. 90-AEA-1294-0E

DETERMINATION OF NO HAZARD TO AIR NAVIGATION

| | | | |
|--------------------------|--|-----------------------|-----------|
| SPONSOR | Town of Ocean City P.O. Box 158 Ocean City, MD 21842 | CONSTRUCTION LOCATION | |
| | | PLACE NAME | |
| | | Ocean City, MD | |
| | | LATITUDE | LONGITUDE |
| | | 38-22-52 | 75-10-32 |
| CONSTRUCTION PROPOSED | DESCRIPTION Antenna Tower EMS Frequencies | HEIGHT (IN FEET) | |
| | | ABOVE GROUND | ABOVE MSL |
| | | 400 | 420 |

An aeronautical study of the proposed construction described above has been completed under the provisions of Part 77 of the Federal Aviation Regulations. Based on the study it is found that the construction would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the construction would not be a hazard to air navigation provided the following conditions are met:

Conditions:

This structure shall be obstruction marked and lighted in accordance with Advisory Circular AC 70/7460-1G, Chapters 3, 4, 5 and 9.

Supplemental notice of construction is required any time the project is abandoned (use the enclosed FAA form), or

- ☒ At least 48 hours before the start of construction (use the enclosed FAA form).
- ☒ Within five days after the construction reaches its greatest height (use the enclosed FAA form).

This determination expires on **January 13, 1992**

unless:

- (a) extended, revised or terminated by the issuing office;
- (b) the construction is subject to the licensing authority of the Federal Communications Commission and an application for a construction permit is made to the FCC on or before the above expiration date. In such case the determination expires on the date prescribed by the FCC for completion of construction, or on the date the FCC denies the application.

NOTE: Request for extension of the effective period of this determination must be postmarked or delivered to the issuing office at least 15 days prior to the expiration date.

This determination is subject to review if an interested party files a petition on or before **July 3, 1991**. In the event a petition for review is filed, it should be submitted in triplicate to the Manager, Flight Information and Constructions Branch, AAT-210, Federal Aviation Administration, Washington, D.C. 20591, and contain a full statement of the basis upon which it is made.

This determination becomes final on **July 13, 1991** unless a petition for review is timely filed, in which case the determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

An account of the study findings, aeronautical objections, if any, registered with the FAA during the study, and the basis for the FAA's decision in this matter will be found on the following page(s).

If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that Agency.

This determination, issued in accordance with FAA Part 77, concerns the effect of this proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of any compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This proposal is to construct an antenna tower in the vicinity of Ocean City, Maryland, approximately 4.5 nautical miles (NM) northwest of Ocean City Airport, Maryland.

SIGNED Francis T. Jordan, Jr. TITLE Airspace Specialist, System Management
ISSUED IN Jamaica, NY ON June 3, 1991



US Department
of Transportation

Federal Aviation
Administration

**SYSTEM MANAGEMENT BRANCH, AEA-530
AIR TRAFFIC DIVISION/EASTERN REGION
FEDERAL AVIATION ADMINISTRATION
FITZGERALD FEDERAL BUILDING
JFK INTERNATIONAL AIRPORT
JAMAICA, NEW YORK 11430**

IN REPLY REFER TO
**AERONAUTICAL STUDY-
NO. 90-AEA-1996-0E**

DETERMINATION OF HAZARD TO AIR NAVIGATION

| | | | |
|----------------------------------|--|-------------------------------------|------------------------------|
| CONSTRUCTION PROPOSED | DESCRIPTION Antenna Tower 106.9 MHZ 3 KW | CONSTRUCTION LOCATION | |
| | | PLACE NAME Ocean City, MD | |
| | | LATITUDE 38-20-04 | LONGITUDE 75-07-16 |
| | | HEIGHT (IN FEET) | |
| | | ABOVE GROUND 343 | ABOVE MSL 353 |

An aeronautical study of the proposed construction described above has been completed under the provisions of Part 77 of the Federal Aviation Regulations. Based on the study it is found that the construction would have a substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the construction would be a hazard to air navigation.

This determination is subject to review if a petition is filed by the sponsor on or before **December 1, 1991**. In the event a petition for review is filed it should be submitted in triplicate to the Manager, Flight Information and Obstructions Branch AAT-210, Federal Aviation Administration, Washington, D.C. 20591, and contain a full statement of the basis upon which it is made.

This determination becomes final on **December 11, 1991** unless a petition for review is timely filed, in which case the determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

An account of the study findings, aeronautical objections, if any, registered with the FAA during the study, and the basis for the FAA's decision in this matter will be found below and/or on the following page(s).

If the structure is subject to the licensing authority of the FCC, a copy of this determination will be sent to that Agency.

This determination, issued in accordance with FAR Part 77, concerns the effect of this proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of any compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This proposal is to construct an antenna tower approximately one nautical mile (NM) north of Ocean City Airport in the vicinity of Ocean City, MD.

At this location and height, this structure would exceed the Obstruction Standards of FAR Part 77 as follows:

Section 77.23 (a) (2) Structures which exceed a specified height within a specified distance of an airport as applied to Ocean City, MD Airport by 141 feet.

Section 77.23 (a) (5) Airport surfaces by penetrating:

Section 77.25 (a) (1) Horizontal surface of Ocean City, MD Airport by 191 feet.

SIGNED

Richard J. Halteman
Richard J. Halteman
Jamaica, NY

TITLE Acting Manager, System Management Branch

ISSUED IN

ON November 1, 1991

AERONAUTICAL STUDY NO. 90-AEA-1996-OE

This structure does exceed departure criteria. This structure would not cause an increase in departure criteria beyond the restrictions already in place.

Negotiations were attempted with the proponent, but resulted in request for aeronautical study at full filed height.

This study was circularized for comment on June 3, 1991. Objections were received. The State of Maryland Aviation objects to any construction that adds to proliferation of obstructions or impacts any Maryland airports.

The town of Ocean City MD, in addition to objecting to any additional obstruction, objects to interference with patterns and arrival/departure operations at the airport. The town is concerned with any potential impact to plans on file for new approaches and improvements to the airport.

The aeronautical study disclosed:

This site is just over one nautical mile north of the airport and approximately aligned with Runway 1/19.

As you approach the airport Runway 19, the structure would be just left of centerline.

At this distance and height, this proposed antenna would be an obstruction which would have to be identified and maneuvered around by arriving and departure aircraft.

At this location, because of the proximity to centerline, this obstruction is in the path of either right or left pattern climbing and descending aircraft. This height is very close to the height an aircraft would normally be at when at this approximate distance.

Obstruction marking and lighting would not alleviate the need to avoid this structure.

The proposed localizer approach was checked. This proposal would not increase any current instrument departure criteria or arrival criteria.

This proposal would not adversely impact any plans on file.

This is an active public use airport with 28 based aircraft. There are approximately 33,000 yearly operations. Runway 1/19 is used more than 40 percent of the time.

AERONAUTICAL STUDY NO. 90-AEA-1996-OE

By locating an obstruction at this height, a substantial amount of operations would be adversely impacted.

Therefore, a Determination of Hazard to Air Navigation is issued.

Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No. _____

ASB Referral Date _____

Referred by _____

Name of Applicant

Aris Mardirossian

Call letters (if issued)

--

Is this application being filed in response to a window? ☐ Yes ☒ No

If Yes, specify closing date: _____

Purpose of Application: (check appropriate box(es))

☒ Construct a new (main) facility

☐ Construct a new auxiliary facility

☐ Modify existing construction permit for main facility

☐ Modify existing construction permit for auxiliary facility

☐ Modify licensed main facility

☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

☒ Antenna supporting-structure height

☐ Effective radiated power

☐ Antenna height above average terrain

☐ Frequency

☒ Antenna location

☐ Class

☐ Main Studio location

☐ Other (Summarize briefly)

Amendment of Pending Application

File Number(s) BPH-901224MI

1. Allocation:

| Channel No. | Principal community to be served: | | |
|-------------|-----------------------------------|-----------|-------|
| | City | County | State |
| 295 | Ocean City | Worcester | MD |

Class (check only one box below)

☒ A ☐ B1 ☐ B ☐ C3

☐ C2 ☐ C1 ☐ C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

9.3 km (5.8 miles) northwest from Ocean City, off State Route 589,

Worcester County, Maryland.

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

| | | | | | | | |
|----------|-----|-----|-----|-----------|-----|-----|-----|
| Latitude | 38° | 22' | 52" | Longitude | 75° | 10' | 32" |
|----------|-----|-----|-----|-----------|-----|-----|-----|

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ☒ No

If Yes, give call letter(s) or file number(s) or both. _____

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any. _____

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 2)

4. Does the application propose to correct previous site coordinates?

☐ Yes ☒ No

If Yes, list old coordinates.

| | | | | | | | |
|----------|---|---|---|-----------|---|---|---|
| Latitude | 0 | ' | " | Longitude | 0 | ' | " |
|----------|---|---|---|-----------|---|---|---|

5. Has the FAA been notified of the proposed construction?

☒ Yes ☐ No

If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available. New guyed tower, Aeronautical Study No. 90-AEA-1294-OE [approval received from FAA]

| |
|------------------|
| Exhibit No. E |
|------------------|

Date _____ Office where filed _____

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

| Landing Area | Distance (km) | Bearing (degrees True) |
|------------------------|---------------|------------------------|
| (a) NONE WITHIN 8.0 KM | | |
| (b) | | |

7. (a) Elevation: (to the nearest meter)

(non-rounded)

(1) of site above mean sea level;

(6.1)* 6 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and

(121.9) 122 meters

(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)]

(128.0) 128 meters

(b) Height of radiation center: (to the nearest meter) H - Horizontal; V - Vertical

(1) above ground

(98.8) 99 meters (H)

(98.8) 99 meters (V)

(2) above mean sea level [(aX1) + (bX1)]

(104.9) 105 meters (H)

(104.9) 105 meters (V)

(3) above average terrain

100 meters (H)

*Based Upon Survey.

100 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

| |
|--------------------|
| Exhibit No. E-1 |
|--------------------|

9. Effective Radiated Power:

(a) ERP in the horizontal plane

3.0 kw (H*) 3.0 kw (V*)

(b) Is beam tilt proposed?

☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

| |
|-------------------|
| Exhibit No. -- |
|-------------------|

_____ kw (H*) _____ kw (V*)

*Polarization

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 3)

10. Is a directional antenna proposed?

☒ Yes ☐ No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field.

Exhibit No.
E-5A, 5B

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)?

☒ Yes ☐ No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service.

Exhibit No.
--

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal?

☒ Yes ☐ No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125.

Exhibit No.
--

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207?

☐ Yes ☒ No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.218 apply?

☒ Yes ☐ No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers.

Exhibit No.
E

(d) If the answer to (a) is No and the answer to (b) is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose.

Exhibit No.
--

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

Exhibit No.
E-4, E-4A

- (1) Protected and interfering contours, in all directions (360°), for the proposed operation.
- (2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
- (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
- (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (5) The official title(s) of the map(s) used in the exhibit(s).

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast (except citizens band or amateur) radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

☒ Yes ☐ No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. (See 47 C.F.R. Sections 73.315(b), 73.316(e) and 73.318.)

Exhibit No.
E

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.
E-2, E-2A

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
E-3

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 316 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 259 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 1,093 sq. km. Population 42,175

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
--

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.373)*

Source of terrain data: *(check only one box below)*

☐ Linearly interpolated 30-second database

☒ 7.5 minute topographic map
see Exhibit E - "Topographic Data"

(Source: _____)

☒ Other *(briefly summarize)*

NGDC 3-second data base see Exhibit E - "Topographic Data"

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 5)

| Radial bearing (degrees True) | Height of radiation center above average elevation of radial from 8 to 16 km (meters) | Predicted Distances | |
|----------------------------------|---|--|---------------------------------------|
| | | To the 3.16 mV/m contour (kilometers) | To the 1 mV/m contour (kilometers) |
| * | | | |
| 0 | 99.4 | 13.6 | 24.3 |
| 45 | 104.0 | 13.9 | 24.8 |
| 90 | 104.4 | 14.0 | 24.9 |
| 135 | 103.1 | 13.9 | 24.7 |
| 180 | 101.9 | 13.8 | 24.6 |
| 225 | 96.1 | 13.4 | 24.0 |
| 270 | 96.2 | 13.4 | 24.0 |
| 315 | 95.3 | 11.6 | 20.7 |

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.

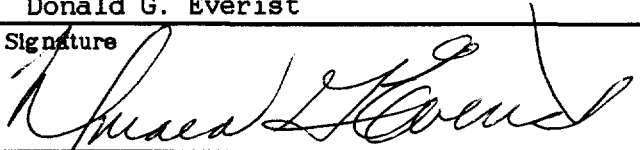
Exhibit No.
--

If No, explain briefly why not.

Refer to Exhibit E.

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

| | |
|---|---|
| Name (Typed or Printed) Donald G. Everist | Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer |
| Signature  | Address (Include ZIP Code) Cohen, Dippell and Everist, P.C. 1300 L Street, N.W., Suite 1100 Washington, D.C. 20005 |
| Date November 19, 1991 | Telephone No. (Include Area Code) (202) 898-0111 |